

STUDIES IN THE EUPATORIEAE (ASTERACEAE). CXLVII.

ADDITIONS TO THE GENERA AMBOROA, AYAPANOPSIS,  
AND HEBECLINIUM IN SOUTH AMERICA.

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Continuing studies of the tribe Eupatorieae have revealed various species needing new combinations or description as new species. In Amboroa a second species is described for a previously monotypic genus. In Ayapanopsis one new species is added and a second is transferred into the genus. In Hebeclinium three species are transferred into the genus with a slight broadening of the concept.

Amboroa wurdackii R. M. King & H. Robinson, sp. nov.

Plantae suffrutescentes usque ad 5 dm altae perennes paucè ramosae. Caules glabri subcarnosi. Folia opposita, petiolis indistinctis 3-4 mm longis; laminae anguste ellipticae plerumque 4-7 cm longis et 0.5-1.0 cm latis base anguste cuneata apice acuta margine remote serrulatae supra et subtus glabrae, nervis pinnatis nervis secundariis paucis valde ascendentibus. Inflorescentiae uni-vel paucicapitatae, pedicellis 3-5 cm longis unicapitatis. Capitula ca. 1 cm alta; flores 50-70; squamae involucri ca. 25 subimbricatae ca. 4-seriatae late vel anguste oblongae apice rotundatae extus glabrae subtiliter multistriatae; corollae albae ca. 6.5 mm longae anguste tubulares glabrae, lobis ca. 0.5 mm longae triangularibus; filamenta in parte superiore ca. 400 $\mu$  longa; thecae antherarum ca. 1 mm longae, appendicibus triangularibus ca. 400 $\mu$  longis base ca. 200 $\mu$  latis; styli inferne glabrae non nodulosi, appendicibus anguste filiformibus dense breviter papillois. Achaenia ca. 3 mm longa glabra; carpodia breviter cylindrica, cellulis indistinctis; pappo uniseriatus, setis ca. 15 inferne pertenuibus laevibus superne valde clavatis armatis. Grana pollinis ca. 20 $\mu$  diam.

TYPE: PERU: Loreto: Alto Amazonas. High rainforest along Río Maranon near Teniente Pinglo, just above Pongo de Manseriche, elevation 250-300 meters, 4-7 October 1962. J.J.Wurdack 2101 (Holotype US).

The species is distinct by having single heads on long pedicel and by the rounded tips of the phyllaries. The leaves also seem to be more narrowly elliptical. There are mostly 15 pappus setae while Cabrera indicated 20-25 in the bolivian species.

Ayapanopsis cuchabensis (B. L. Robinson) R. M. King & H. Robinson, comb. nov. Eupatorium cuchabense B. L. Robinson, Contr. Gray Herb. n. s. 100:13. 1932. Bolivia.

Another species that has been associated with A. cuchabensis is Eupatorium thermarum B. L. Robinson but no material of the latter has been seen for evaluation.

Ayapanopsis ferreyrii R. M. King & H. Robinson, sp. nov. Plantae frutescentes usque ad 1 m altae? pauce ramosae. Caules hirtelli glabrescentes rubelli. Folia opposita anguste petiolata, petiolis 0.5-1.0 cm longis; laminae coriaceae ovato-lanceolatae vel lanceolatae base breviter cuneatae margine subintegrae vel remote pauce serrulatae apice argute acutae supra sparsim pilosae glabrescentes subtus plerumque in nervis puberulae, nervis pinnatis, nervis secundariis utrinque 5 sensim ascendentibus. Inflorescentiae corymboso-paniculatae, pedicellis dense pilosis 2-5 mm longis. Capitula ca. 12 mm alta et 10 mm lata; flores ca. 25-30; squamae involucris ca. 25-28, subimbricatae 4-5-seriatae 2-7 mm longae late ovatae vel lineares apice breviter acuminatae margine vix vel non scariosae extus puberulae multistriatae rubescentes. Corollae ca. 7 mm longae anguste infundibulares, lobis 0.5-0.7 mm longis extus glanduliferis; filamenta antherarum in parte superiore ca. 400 $\mu$  longa; thecae ca. 1.5 mm longae, appendicibus late oblongis ca. 350 $\mu$  longis et 250 $\mu$  latis; basi stylorum papilloso. Achaenia 3 mm longa glabra; carpodia ca. 0.3 mm longa et 0.5 mm lata; setae pappi 30-35 ca. 5 mm longae. Grana pollinis ca. 30 $\mu$  diam.

TYPE: PERU: Cajamarca: Jaen: Cordillera San Jose. 1700 m, Setiebre 23, 1961. Claudine Friedberg 614 (Holotype US).

The species is most closely related to A. tarapotensis (B.L.Robinson) K. & R. but differs by the smaller number of flowers per head, the glabrous achenes, and the papillose rather than smooth bases of the styles.

The following three South American species show almost all the features of typical Hebeclinium. They differ primarily by the slightly broadened tips of the style branches but these are still unusually narrow compared to those most members of the tribe. One of the three, H. leucolithogenum, also has a less convex receptacle but this is a very small structure very similar to those of other members of Hebeclinium and unlike those of Bartlettina.

Hebeclinium beneolens (B.L.Robinson) R. M. King & H. Robinson, comb. nov. Eupatorium beneolens B. L. Robinson, Contr. Gray Herb. n. s. 73:5. 1924. Peru.

Hebeclinium leucolithogenum (B. L. Robinson) R. M. King & H. Robinson, comb. nov. Eupatorium leucolithogenum B. L. Robinson, Contr. Herb. n. s. 80:25. 1928. Colombia.

Hebeclinium vestitum R. M. King & H. Robinson, nom. nov. Eupatorium vestitum Poepp. in Poepp & Endl. Nov. Gen. ac Sp. 3:55. 1845. not E. vestitum Sprengel Syst. 3:416. 1826. Peru.

#### Acknowledgement

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*Ambrosia wurdackii* R. M. King & H. Robinson  
 Holotype

SMITHSONIAN PERUVIAN EXPEDITION  
 Departamento de Loreto, Provincia de Alto Amazonas

*Ambrosia wurdackii* R. M. King & H. Robinson

Locally frequent on rocks in mist ravine. Flowers  
 white.

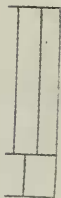
High rainforest along Rio Marañon near Tumbes Pingo, just above Pungo  
 de Marañon, elev. 250-300 m

J. J. WURDACK, No. 2102

4-7 October 1962

Collected in collaboration with the Museo de Historia Natural "James Prado"  
 Lima, assisted by a grant from the National Science Foundation

*Ambrosia wurdackii* R. M. King & H. Robinson, Holotype,  
 United States National Herbarium.



UNIVERSIDAD NACIONAL MAYOR DE SAN MARCO  
 MUSEO HISTORICO NACIONAL y PLANTAS DEL PERU  
 Lugar: \_\_\_\_\_  
 Fecha: \_\_\_\_\_  
 País: \_\_\_\_\_  
 Probital: \_\_\_\_\_  
 Fecha de recolección: 18. 1973 Altitud: 1700 m.  
 N. V.: \_\_\_\_\_ Det.: \_\_\_\_\_  
 Colector: Robinson & Ferreyri  
 Herbario San Marcos U.S.M.

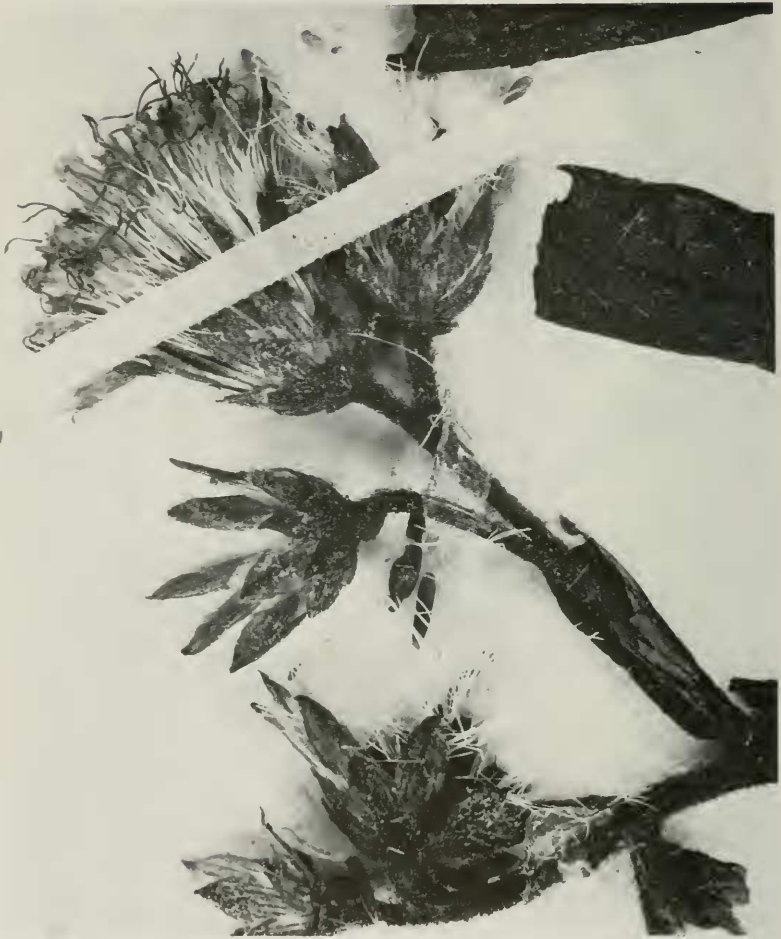
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Ayapanopsis ferreyrii R. M. King & H. Robinson,  
 Holotype, United States National Herbarium.



Ayapanopsis ferreyrii R. M. King & H. Robinson.  
Enlargement of heads.